the positive response ratio was calculated by dividing the number of patients who followed the pharmacist advice to total number of patients to whom the advice was provided. The cost saving per patient per year was determined from available literature. **RESULTS:** A total of 180 interventions were made by the pharmacists. Pattern management (100 cases, 55.5%) and alerting physician of an abnormal A1c (61, 33.8%) were the most frequent. The most accepted interventions were glucometer training (2 cases, 100%), advising to correct hypoglycemic/hyperglycemic episodes (12, 66.7%), and instructing on the proper use of their injectables (5, 60.0%). Cost savings of $1914/patient/year were estimated as a result of the 4th and 5th intervention. Also, interventions 1, 2 and 3 resulted in cost-saving of $1161, $ 1203, and $1531 per patient per year respectively. **CONCLUSIONS:** Our model showed that pharmacist interventions can result in significant cost savings among diabetic patients.

HM3

IMPACT OF A SPECIALTY CARE MANAGEMENT PROGRAM ON MEDICATION ADHERENCE AND HEALTH CARE UTILIZATION AMONG NON–ELDERLY ADULTS WITH MULTIPLE SCLEROSIS

Yu J, Tan H, Singer J
HealthCore, Inc, Wilmington, DE, USA

OBJECTIVES: To evaluate the impact of a specialty care management program (PrecisionRx Pharmacy Management) on medication adherence, risk of hospitalization, and costs of care among MS patients. **METHODS:** This study was a retrospective analysis of administrative claims from 13 geographically dispersed US commercial health plans. Patients aged 18–64 years with ≥2 claims of MS diagnosis and ≥1 MS medications (Interferon beta-1a, Interferon beta-1b, and Glatiramer acetate) from January 1, 2004 and April 30, 2008 were identified. For patients enrolled in PrecisionRx program (managed), index date was defined as the program participation date; for other patients (non-managed), index date was randomly assigned through Monte Carlo simulation with regard to the managed patients. At least 12 months of continuous eligibility pre- and post- index was required. Outcome metrics included medication adherence (measured by medication possession ratio (MPR)), risk of MS-related hospitalization, and MS-related costs. Multivariate analyses were performed to adjust for baseline demographics, baseline health care costs, and clinical characteristics. **RESULTS:** Among 3862 patients identified, 79% were managed and 21% were non-managed patients. The multivariate analysis showed that compared with the non-managed group, the managed group had 0.21 higher MPR (95% CI: 0.19–0.23, $p < 0.001$), were less likely to be hospitalized for MS (adjusted odds ratio: 0.53 (0.40–0.70), $p < 0.001$), and had 25% higher MS-related costs (95% CI: 20%-31%, $p < 0.001$), controlling for other covariates. The relatively larger increase in MS-related costs from pre-index to post-index among the managed group (median: $3791 vs. $2277) was primarily driven by larger increase in their pharmacy costs (median: $3968 vs. $1885). **CONCLUSIONS:** Overall, this specialty care management program was associated with better medication adherence and lower risk of MS-related hospitalization. The associated higher MS-related costs among the managed group could be explained by their relatively larger increase in pharmacy costs, as expected due to better medication adherence and high costs of MS medication.

HM4

THE IMPACT OF A PHARMACIST–PROVIDED TELEPHONE MEDICATION THERAPY MANAGEMENT PROGRAM ON MEDICATION AND HEALTH–RELATED PROBLEMS, MEDICATION ADHERENCE, AND TOTAL DRUG COSTS AMONG MEDICARE BENEFICIARIES: A 6–MONTH FOLLOW–UP

Moczygemba LR[1], Barner JC[2], Lawson KA[2], Brown CM[2], Gabrillo E[3], Godley PJ[4], Johnsrud M[2]
[1]Virginia Commonwealth University, Richmond, VA, USA, [2]University of Texas at Austin, Austin, TX, USA, [3]Scott and White Health Plan, Temple, TX, USA, [4]Scott and White Health System, Temple, TX, USA

OBJECTIVES: To determine if differences existed between the intervention group [after participating in a pharmacist-provided telephone medication therapy management (PPMTM) program] and the control group in: 1) Medication/health-related problems (MHRPs); 2) Medication adherence; and 3) Total Part D drug costs. **METHODS:** This quasi-experimental study of Part D beneficiaries from a Texas health plan used the Andersen Model as its theoretical framework. Predisposing factors were age, gender, and race; need factors were number of medications, number of chronic diseases and medication regimen complexity. The intervention and control groups were matched on number of medications and number of chronic diseases. The health behavior was PPMTM participation. Outcomes were changes in: 1) Number of MHRPs; 2) Medication adherence using medication possession ratio (MPR); and 3) Total drug costs. Multivariate regression was used for group comparisons of outcomes. **RESULTS:** The intervention (n = 60) and control (n = 60) groups were not statistically different in predisposing or need factors except for gender (intervention = 51.7% male; control = 28.3% male; $p = 0.009$). At baseline, 4.8 (±2.7) MHRPs were identified in the intervention group and 9.2 (±2.9) in the control group. At the 6-month follow-up, 2.5 (±2.0) and 7.9 (±3.0) MHRPs remained, respectively. Multivariate regression revealed that the intervention group had significantly more MHRPs resolved ($p = 0.0003$) when compared to the control group, while controlling for predisposing and need factors. There were no other significant predictors of MHRP resolution, Analyses showed no significant predictors of change in MPR or total drug costs from baseline to 6-month follow-up. **CONCLUSIONS:** A telephone MTM program was effective in resolving MHRPs among Medicare beneficiaries; however, no significant differences existed between the intervention and control groups in medication adherence and total drug costs.

PODIUM SESSION IV: MEDICARE STUDIES II

MD5

PREDICTORS OF ENROLLMENT IN MEDICARE PART D: ARE BENEFICIARIES RATIONAL?

Lines LM[1], Menzin J[1], Lang K[1], Korn JR[1], Neumann PJ[2]
[1]Boston Health Economics, Inc, Waltham, MA, USA, [2]Tufts Medical Center, Boston, MA, USA

OBJECTIVES: The initiation of Medicare Part D in 2006 offers an ideal opportunity to study real-world decision-making and the role of adverse selection and other factors in insurance enrollment. Our objective was to identify predictors of Part D enrollment among individuals with a range of health conditions and insurance designs. **METHODS:** The sample included all individuals in both the 2005 and 2006 Medical Expenditure Panel Survey (MEPS) datasets who were enrolled in Medicare, but not Medicaid, as of December 2005. A multivariate logistic regression was used to assess the effects of sociodemographics, health status, 2005 supplemental insurance coverage, and 2005 person-level out-of-pocket (OOP) drug expenditures on the likelihood of enrolling in Part D in 2006. MEPS sample weights were used to calculate standard errors. **RESULTS:** Out of 1,436 persons who met inclusion criteria, 657 (45.4%) enrolled in Part D during 2006. Compared to the no-Part D group, the Part D group was slightly older, had more non-whites, rural residents, and unmarried individuals, and was slightly less educated and poorer. The Part D group had more beneficiaries with Medigap coverage only (17.2% vs. 5.7%), fewer with employer-based coverage only (18.3% vs. 37.1%), and more with no private supplemental insurance (46.1% vs. 32.1%). In multivariate analyses, significant positive predictors of Part D enrollment were having Medigap supplemental insurance only (OR: 1.99; 95% CI: 1.25–3.19) and OOP drug expenditures ≥$2500 in 2005 (OR: 1.58; 95% CI: 1.03–2.41). Most beneficiaries with employer-based coverage in 2005 maintained that coverage in 2006 (91.8%). **CONCLUSIONS:** Based on first-year data, fears of only the sickest beneficiaries enrolling in Part D and employers withdrawing drug benefits to retirees seem to have been unwarranted. Existing coverage and high prior drug spending drove the decision to enroll in Part D in what appears to have been a rational way.

MD6

PREDICTORS OF UTILIZATION OF ACE INHIBITORS AND ANGIOTENSIN II RECEPTOR BLOCKERS AMONG MEDICARE PART D ENROLLEES WITH DIABETES

Yang Y, Thumula V, Pace PF, Banahan BF, Wilkin NE, Lobb WB
University of Mississippi, University, MS, USA

OBJECTIVES: The objectives were to describe angiotensin-converting enzyme inhibitors (ACEI) and angiotensin II receptor blockers (ARB) use among Medicare Part D enrollees with diabetes and to identify patient characteristics that predict ACEI/ARB utilization. **METHODS:** This is a longitudinal retrospective cohort study. The study sample included Medicare Part D enrollees from 6 states (Alabama, California, Florida, Mississippi, New York, and Ohio) aged 18 years or older with the diagnosis of diabetes. Medicare Part D claims data for the first 6 months of 2006 were evaluated for any utilization of ACEI/ARB. The outcome of interest was the percentage of at least one claim for an ACEI or an ARB during the first half of 2006. **RESULTS:** A total of 1,888,682 patients met our inclusion criteria. Mean age (±SD) was 71.6 (±11.6) years, 59.5% were female, and 66.4% were white. Approximately 58.9%, 5.8%, 0.5% had coexisting hypertension, nephropathy, and hypertension + nephropathy. Overall, 56.9% were receiving ACEI/ARB therapy. Logistic regression indicated that patients with coexisting hypertension + nephropathy and hypertension were 72% and 36% more likely to use ACEI/ARB compared to patients without hypertension and/or nephropathy. However, patients with nephropathy were 24% less likely to receive ACEI/ARB therapy. Females, older patients, and patients of nonwhite races were also more likely to use ACEI/ARB. Patients with myocardial infarction, sleep apnea, coronary artery disease, retinopathy or heart failure were more likely to have used ACEI/ARB, while the opposite was true for those with hypercholesterolemia, peripheral vascular, cerebrovascular, or chronic obstructive pulmonary diseases. All results were statistically significant at P = .0001 level. **CONCLUSIONS:** Less than 60% of Medicare Part D enrollees with diabetes received ACEI/ARB therapy. Several patient characteristics can predict ACEI/ARB use. Opportunities exist for quality-improvement interventions that could increase the outcomes for high-risk patients.

MD7

DOES MEDICARE HAVE AN IMPLICIT COST–EFFECTIVENESS THRESHOLD?

Chambers J[1], Neumann PJ[2], Buxton MJ[3]
[1]Mapi Values, Boston, MA, USA, [2]Tufts Medical Center, Boston, MA, USA, [3]Brunel University, Uxbridge, Middlesex, UK

OBJECTIVES: Despite the huge cost of the program, the Centers for Medicare and Medicaid Services (CMS) maintains that cost-effectiveness is not considered in national coverage determinations (NCDs) for medical technologies. Our objective was to assess the cost-effectiveness of technologies and interventions that are the subject of Medicare NCDs in order to investigate whether an implicit cost-effectiveness threshold exists. In addition, we explored whether CMS have cited cost-effectiveness evidence in NCDs. **METHODS:** We reviewed NCD decision memos from 1999 through 2007 (n = 103). A literature review was conducted for each coverage decision to find relevant economic evaluations. The economic evaluation that best represented each coverage decision was included in a review of the cost-effectiveness of medical technologies considered in NCDs. **RESULTS:** Sixty-four coverage decisions were identified from 103 decision memos. Fifty were associated with a positive coverage decision and 14 with a